

Amendments to the Claims:

This listing of claims replaces all prior versions and listings of claims in the application:

Listing of Claims:

1. (Previously Presented) A microparticle less than about 20 microns in diameter, comprising:

a polymeric matrix consisting essentially of one or more synthetic polymers having a solubility in water of less than about 1 mg/l;

a lipid; and

nucleic acid molecules, at least 50% of which are supercoiled circular plasmid DNA.

2-3. (Cancelled)

4. (Previously Presented) The microparticle of claim 1, wherein the DNA comprises an expression control sequence operatively linked to a coding sequence.

5-51. (Cancelled)

52. (Previously Presented) A preparation of microparticles, each of which comprises a polymeric matrix, a nucleic acid, and a lipid, wherein:

the polymeric matrix consists essentially of one or more synthetic polymers having a solubility in water of less than about 1 mg/l;

at least 90% of the microparticles have a diameter less than about 100 microns; and

the nucleic acid is an expression vector consisting of circular plasmid DNA molecules, at least 50% of which are supercoiled.

53-63. (Cancelled)

64. (Previously Presented) The preparation of claim 52, wherein at least 90% of the microparticles have a diameter less than about 20 microns.

65. (Previously Presented) The preparation of claim 52, wherein the polymeric matrix is biodegradable.

66. (Previously Presented) The preparation of claim 52, wherein the polymeric matrix comprises a synthetic, biodegradable copolymer.

67. (Previously Presented) The preparation of claim 66, wherein the copolymer is poly-lactide-co-glycolide.

68. (Previously Presented) The preparation of claim 67, wherein the ratio of lactic acid to glycolic acid in the copolymer is within the range of about 1:2 to about 4:1 by weight.

69. (Previously Presented) The preparation of claim 67, wherein the ratio of lactic acid to glycolic acid in the copolymer is about 65:35 by weight.

70-84. (Cancelled)

85. (Currently Amended) The microparticle of claim 4, wherein the coding sequence encodes an expression product comprising a sequence that is at least 7 amino acids in length and is-and-comprising-a-sequence identical to the sequence of (a) a fragment of a naturally-occurring mammalian protein, or (b) a fragment of a naturally-occurring protein from an infectious agent which infects a mammal.

86. (Currently Amended) The microparticle of claim 85, wherein the sequence is expression-product-comprises a fragment of a protein selected from the group consisting of

myelin basic protein (MBP), proteolipid protein (PLP), invariant chain, GAD65, islet cell antigen, desmoglein,  $\alpha$ -crystallin, and  $\beta$ -crystallin, wherein the fragment binds an MHC class II molecule.

87. (Currently Amended) The microparticle of claim 85, wherein the sequence is ~~expression product comprises an amino acid sequence~~ identical to a sequence selected from the group consisting of SEQ ID NOS 1-46.

88. (Currently Amended) The microparticle of claim 85, wherein the expression product further comprises a trafficking sequence selected from the group consisting of a sequence which trafficks to endoplasmic reticulum, a sequence which trafficks to a lysosome, a sequence which trafficks to an endosome, and a sequence which trafficks to the nucleus.

89. (Currently Amended) The microparticle of claim 85, wherein the sequence is ~~expression product comprises an amino acid sequence~~ identical to the sequence of an antigenic portion of a tumor antigen.

90. (Currently Amended) The microparticle of claim 85, wherein the ~~expression product comprises an amino acid sequence identical to the sequence of an antigenic fragment of a protein naturally expressed by an infectious agent~~ is selected from the group consisting of a virus, a bacterium, and a parasitic eukaryote.

91. (Previously Presented) The microparticle of claim 90, wherein the infectious agent is selected from the group consisting of human papillomavirus, human immunodeficiency virus, herpes simplex virus, hepatitis B virus, hepatitis C virus, *Plasmodium* species, and mycobacteria.

92. (Previously Presented) The microparticle of claim 90, wherein the infectious agent is a virus.

93. (Previously Presented) The microparticle of claim 1, wherein the lipid is a charged lipid.

94. (Previously Presented) The microparticle of claim 1, wherein the lipid is hexadecyltrimethylammonium bromide.

95. (Previously Presented) The microparticle of claim 1, wherein the polymeric matrix is biodegradable.

96. (Previously Presented) The microparticle of claim 1, wherein the polymeric matrix comprises a synthetic, biodegradable copolymer.

97. (Previously Presented) The microparticle of claim 96, wherein the copolymer is poly-lactide-co-glycolide.

98. (Previously Presented) The microparticle of claim 97, wherein the ratio of lactic acid to glycolic acid in the copolymer is within the range of 1:2 to 4:1 by weight.

99. (Previously Presented) The microparticle of claim 97, wherein the ratio of lactic acid to glycolic acid in the copolymer is 65:35 by weight.

100. (Previously Presented) The microparticle of claim 1, wherein the polymeric matrix further comprises a targeting molecule.

101. (Previously Presented) The microparticle of claim 1, wherein the microparticle has a diameter of less than about 11 microns.

102. (Previously Presented) The microparticle of claim 1, wherein at least 60% of the circular plasmid DNA is supercoiled.

103. (Previously Presented) The microparticle of claim 1, wherein at least 70% of the circular plasmid DNA is supercoiled.

104. (Previously Presented) The microparticle of claim 1, wherein at least 80% of the circular plasmid DNA is supercoiled.

105. (Previously Presented) The preparation of claim 52, wherein the polymeric matrix further comprises a targeting molecule.

106. (Previously Presented) The preparation of claim 52, wherein the microparticles have a diameter of less than about 11 microns.

107. (Previously Presented) The preparation of claim 52, wherein the microparticles are suspended in an aqueous solution.

108. (Previously Presented) The preparation of claim 52, wherein the microparticles are a dry solid.

109. (Previously Presented) The preparation of claim 52, wherein the lipid is a charged lipid.

110. (Previously Presented) The preparation of claim 52, wherein the lipid is hexadecyltrimethylammonium bromide.

111. (Previously Presented) The preparation of claim 52, wherein at least 60% of the circular plasmid DNA is supercoiled.

112. (Previously Presented) The preparation of claim 52, wherein at least 70% of the circular plasmid DNA is supercoiled.

113. (Previously Presented) The preparation of claim 52, wherein at least 80% of the circular plasmid DNA is supercoiled.